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Journal of Threatened Taxa

10.11609/jott.2022.14.9.21751-21902
www.threatenedtaxa.org

26 September 2022 (Online & Print)
14(9): 21751–21902
ISSN 0974-7907 (Online)
ISSN 0974-7893 (Print)

Open Access

ISSN 0974-7907 (Online); ISSN 0974-7893 (Print)

Publisher
Wildlife Information Liaison Development Society
www.wild.zooreach.org

Host
Zoo Outreach Organization
www.zooreach.org

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continued on the back inside cover

Cover: ***Pipistrellus tenuis*** **recorded during the small mammalian fauna study, Manipur, India. © Uttam Saikia.**

Journal of Threatened Taxa | www.threatenedtaxa.org | 26 September 2022 | 14(9): 21786–21796

ISSN 0974-7907 (Online) | ISSN 0974-7893 (Print)

https://doi.org/10.11609/jott.7816.14.9.21786-21796

#7816 | Received 04 January 2022 | Final received 01 July 2022 | Finally accepted 24 August 2022

COMMUNICATION

Population density and nesting behaviour of Indian Giant Squirrel *Ratufa indica* (Erxlebeln, 1777) in Bhimashankar Wildlife Sanctuary, Western Ghats of Maharashtra, India

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Abstract: The Indian Giant Squirrel *Ratufa indica* (Erxlebeln, 1777) has been officially designated as Maharashtra's state animal. It is restricted to the eco-sensitive Western Ghats region and is currently classified as Least Concern species on the IUCN Red List. However, the species is dependent on intact habitat and is negatively impacted by habitat fragmentation. Population density and nesting behavior were studied in a major habitat in the tropical semi-evergreen and evergreen forest of India's Bhimashankar Wildlife Sanctuary. Two-hundred-and-twenty-three direct sighting along 60 km line transects were used to estimate squirrel density. It averaged 13.9±0.18 squirrels/km^2. Nesting characteristics were evaluated using 4,224 nests. The squirrel uses 52 different tree species for nesting, with *Mangifera indica* (15.57%), *Olea dioica* (14.65%), and *Mallotus phillippensis* (9.78%) being the most popular. The drays were found on trees that are taller than average, have a massive girth at the breast height, and have continuous closed canopies. To avoid predators, Indian Giant Squirrels usually flee to the nearest adjacent tree.

Keywords: Cryptic behaviour, drey, population density, rodent, Rodentia, sacred grove, Sciuridae.

Editor: Giovanni Amori, CNR-Research Institute on Terrestrial Ecosystems, Rome, Italy. **Date of publication:** 26 September 2022 (online & print)

Citation: Rathod, G., E. Bharucha & K. Yardi (2022). Population density and nesting behaviour of Indian Giant Squirrel *Ratufa indica* (Erxlebeln, 1777) in Bhimashankar Wildlife Sanctuary, Western Ghats of Maharashtra, India. *Journal of Threatened Taxa* 14(9): 21786–21796. https://doi.org/10.11609/jott.7816.14.9.21786-21796

Funding: Self-funded.

Competing interests: The authors declare no competing interests.

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Author contributions: GR—Identification of Indian giant squirrels nesting sites, designing and finalizing of the techniques (methodology), field surveys and data collection, data analysis, data interpretation, and revision of the paper. EB—Conceptualization of study, guiding at every step and discussions periodically regarding the data collection. Writing the manuscript and correcting at every stage till it is finalised. KY—Finalization of topic, providing all necessary help for permissions, time to time discussion and submission of work.

Acknowledgments: The authors are thankful to the R.K. Wankhede (IFS), conservator of forests (wildlife) Pune, Bhimashankar Wildlife Division, and all forest staff for their help during the study.

INTRODUCTION

The Indian Giant Squirrel *Ratufa indica* is the world's largest tree squirrel and can be found in a variety of forest habitats (Borges et al. 2008). It is most common in continuous forest canopies. Its large body size and intense vocalisations limit it to arboreal niches. It does, however, require continuous canopies to move through its territories. It is frugivorous and granivorous, making it an excellent natural pollinator. It constructs a globular nest out of leaves and twigs (Borges et al. 1989; Ramachandran et al. 1992). It's a good indicator of forest disturbance. Because of its widespread distribution across almost the entire subcontinent, it is currently classified as 'Least Concern' on the IUCN Red List. However, due to anthropogenic activities such as deforestation and habitat fragmentation, this species is declining (Rajamani & Marsh 2010).

The density of squirrel in Bhimashankar Rai (Riparian area within Bhimashankar) was reported to be 100 individual/km^2 (Borges et al. 1989). From 1992 to 1993, Mali et al. (1998) and Somnathan et al. (2007) conducted a status survey of *Ratufa indica* in protected areas and intervening reserved forests in the Western Ghats and central India. The survey confirmed the extinction of *Ratufa indica dealbata* in Gujarat and the vulnerable status of *Ratufa indica* in the Western Ghats of Maharashtra. The researcher also compared the Indian Giant Squirrel's home range and distribution in Bhimashankar Wildlife Sanctuary (Borges et al. 2007; Somnathan et al. 2007; Mehta et al. 2012). According to data from the intensive study area, the population's home range had decreased by 20% after a seven-year gap. The main reason for this decline was habitat degradation in the Bhimashankar Wildlife Sanctuary (Borges et al. 2007; Somnathan et al. 2007; Mehta et al. 2012).

MATERIALS AND METHODS

Study area

In 2019, this research was conducted throughout the Bhimshankar Wildlife Sanctuary (BWS). The sanctuary is located between the coordinates 19.132 ^{0}N and 73.554 ^{0}E. It has a total area of 131 km^2 (51 sq.mi.) and is located in the northern part of Maharashtra, in the Western Ghats. The sanctuary contains a variety of habitats, including steep slopes, plateaus, uplands, gorges, valleys, and cliffs. In the sanctuary's heart is an ancient Shiva temple. It is close to the source of the Bhima River. Bhimashankar has two ranges: Bhima 1 (Bhimashankar, Ahupe, Bhorgiri, Kondwal, Nigdale, Sakeri, Bhatti, Pathan, Yelavli, and Ghatghar beat.) and Bhima 2 (Slope and Plains on the konkan side of Bhimashankar, Razpa, Khopivali, Narivali, Zamburde, Dongarnave, Khandas, and Nandgaon beat).

The rainy season (June–October) brings an average of 3,000 mm of rain to BWS. Seasonal montane cloud forests can be found here. These forests have high conservation value because they serve as water catchment areas. Furthermore, the protected areas are rich in endemics such as epiphytes and bryophytes. The sanctuary is said to be home to over 529 faunal species, including the Giant Squirrel, Leopard, Golden Jackal, and Mouse Deer. Furthermore, approximately 20% of the mammals reported by BWS are listed in Schedule I of the Wildlife Protection Act (Borges et al. 1992; Somanathan et al. 2007).

The tropical ecosystem relies heavily on vegetation. The sanctuary's vegetation consists of evergreen, semi-evergreen, and moist-deciduous forests, with the latter two being the most prevalent. *Mangifera indica, Olea dioica, Macaranga peltate, Memecylon umbellatum, Atlantia racemose*, and *Xantolis tomentosa* are the main plant species in this sanctuary. *Carvia callosa* is widely distributed throughout the sanctuary (Ghate et al. 1994).

Population density

To estimate the population density of giant squirrels in the study area, the line transect method (Jathanna et al. 2008; Thomas et al. 2010) and distance sampling method were used. Field sampling was conducted from 20 May to 30 June 2019. During the study, we sampled the abundance of the squirrel using 43 randomly selected line transects. Each transect was surveyed between 0600 & 1000 h and 1600 & 1830 h. Each transect was different in length, ranging from 1–3 km. The squirrel was observed directly using a portable Garmin GPS etrex 10 receiver. A Bunshell pro Yardage sport 450 rangefinder was used to measure the direct distance of the observation, the height of the sighting, and the tree height. The population density of the Indian Giant Squirrel was estimated using distance-sampling techniques and a modelled detection function using the software Distance; version 6.0 (Thomas et al. 2010). The model with the Akaike information criteria (AIC) was chosen (Jathanna et al. 2008; Thomas et al. 2010). Squirrel cluster density (C) and standard errors were estimated by grouping the data into 10 m perpendicular intervals. To select the best model for estimating density, we used the minimum AIC as the standard model

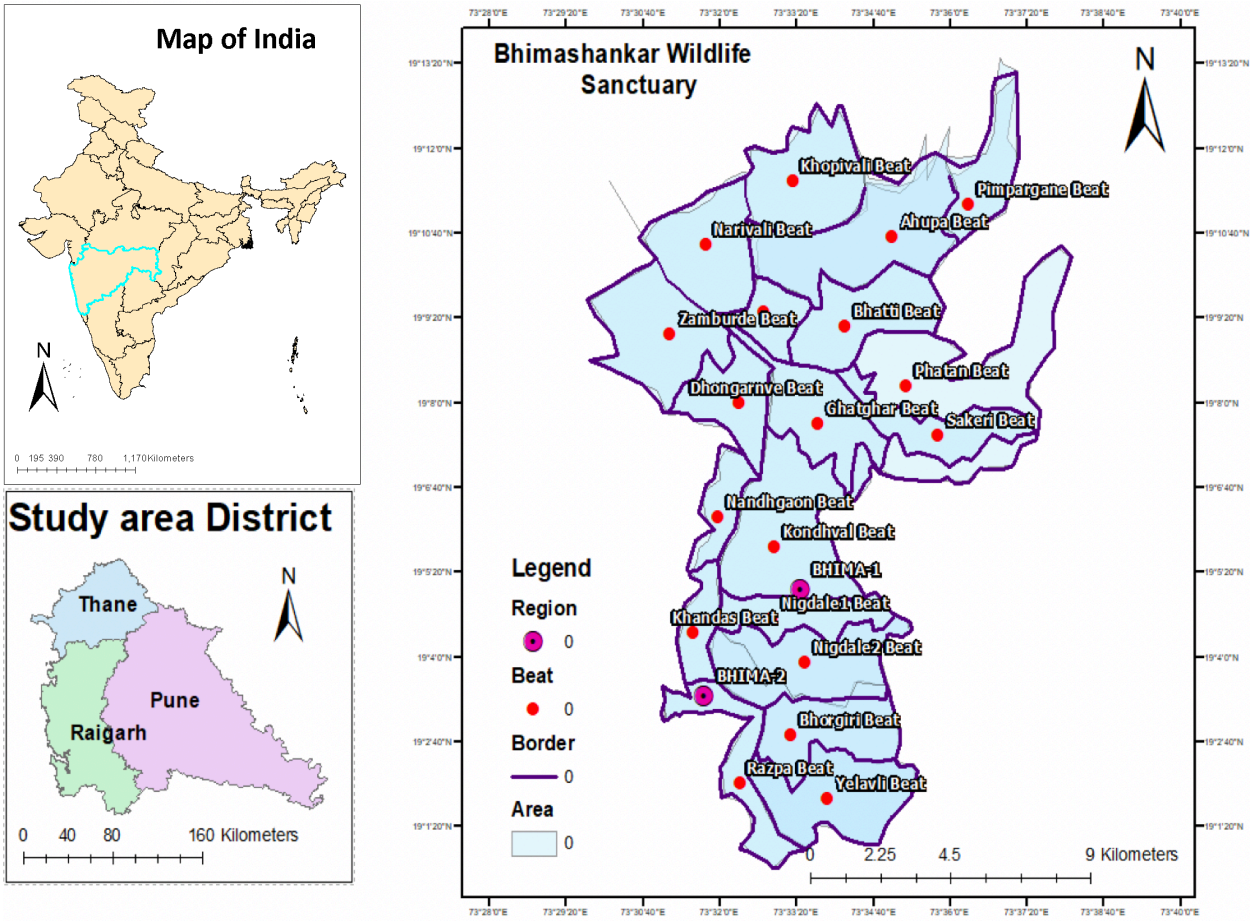

Figure 1. Map of the study area.

selection procedure.

Nesting characteristics

Data were collected when the squirrels were most active and visible in the morning between 0600 h & 1000 h and in the evening between 1600 h & 1830 h. To sample the squirrel nests, line transects were randomly placed. Nest quality (old/new), size, shape, thickness, and leaf compositions of the nest, host tree, tree height, girth at breast height (GBH), canopy height and continuity, and height of the nest from the ground were all measured. The nest's locations were recorded using a portable GPS receiver, the etrex 10. Trees were defined as plants with girths greater than 10 cm at breast height. DSLR camera (NIKON D3400) were used to photograph the nests and squirrels. Wherever possible, a standard Olympus binocular was used for observations as well as the identification of leaves used to build the nests.

RESULTS AND DISCUSSION

Population density

There were 223 sightings of Indian Giant Squirrels within the sanctuary's 43 line transect totalling 60 km. Half-normal with cosine proved to be the best fit for giant squirrel data based on the lowest AIC value (311.5) the encounter rate was 61.2 km per hour walked. The squirrel is known to be a solitary animal, as evidence by this study, which recorded no more than two individuals in a group. The mean group size was 0.929, and the group density per square km was 13.929 ± 0.18, in BWS (Table 1).

In comparison to reports from southern and central India (Jathanna et al. 2008; Baskaran et al. 2011), it is clear that the Indian Giant Squirrel population at BWS is relatively dense (Table 2). The variation in different estimates used and the differences between habitat types in the different studies could be the cause. Seasonal variation and observer differences, on the other hand, limit the comparison. Climate, environment,

Table 1. Population density and average group size of Indian Giant Squirrel (density/km2) estimated in Bhimashankar Wildlife Sanctuary.

Parameters	Value
No. of transects	43
Effort (km)	60
Number of group detection (n)	223
Key function model	Half-normal key
Key adjustment	Cosine
Detection probability	37.6
Effective strip width (m)	1.0
Encounter rate of group/km (n/l)	3.7
Encounter rate % CV	61.2
Mean group size	0.929
Group density/km^2	13.929 ± 0.18
Group density % CV	1.35
Group density 95% CI	13.56
AIC	311.5

Table 2. Density estimates of the Indian Giant Squirrel by earlier studies in India.

Study area	Density/km^2 of Indian giant squirrel	Authors
Bhimasankar Wildlife Sanctuary	13.92	Present study
Similipal Tiger Reserve	25.6	Palei et al. (2015)
Satpura National Park	5.59	Gurjar et al. (2013)
Madumalai Tiger Reserve	6.4	Ramesh et al. (2012)
Madumalai Wildlife Sanctuary	2.9	Baskaran et al. (2011)
Bandipur Tiger Reserve	2.36	Jathana et al. (2008)
Bhandra Tiger Reserve	12.25	Jathana et al. (2008)
Bhimasankar Wildlife Sanctuary	12.4	Borges et al. (1999)
Bhimasankar Wildlife Sanctuary	15.89	Mehta et al. (2011)

and topography all play a role in the distribution of this species. Several studies have suggested that tree cover and food plant diversity have a significant impact on the presence of the Indian Giant Squirrel in tropical areas (Jathanna et al. 2008; Baskaran et al. 2011; Mehta & Kulkarni 2011). The presence of a continuous canopy and the availability of more food plant species will allow for more favourable conditions in terms of their density. As a result of our research, BWS has the second largest population of Indian Giant Squirrels in India (Borges et al. 1999; Jathanna et al. 2008; Baskaran et al. 2011; Mehta & Kulkarni. 2011; Gurjar et al. 2013; Palei et al. 2015).

Habitat use and status

Forests are currently found in small fragments or riverine strips. They are thus frequently seen in Maharashtra's sacred groves and hill stations like Mahabaleshwer and Matheran, where the forest has been left relatively intact. As a result, the population's local status ranges from near threatened to endangered, and even locally extinct. This the determined by the size and integrity of the forest, the availability and abundance of food (floral diversity), and the appearance of the forest in areas where poaching is prohibited. Furthermore, connectivity between forest fragments may be linked to hunting pressure in forest corridors outside of protected areas. However, residents of Bhimashankar claim that this is no longer a serious concern (Image 1).

Food sources in most tropical forests are distributed at random in space and time (Fleming et al. 1987; Schaik et al. 1993). The giant squirrel, like other species, requires a diverse landscape with the preferred resources. Only 9% to 11% of tree species were not utilised by the giant squirrel (Borges et al. 2007) (Image 4 & 5).

Giant squirrels adapted to their arboreal habitat through a variety of morphological and behavioural adaptations. It is mostly graceful and can perform breathtaking leaps between trees. It feeds while suspended by its hind limbs only. Its long tails serve as a balancing mechanism. They used their teeth to break tree twigs and use those twigs to build their nests. Surprisingly, when food is scarce, these squirrels feed on the nesting materials (Borges et al. 1993a; Datta et al. 1998). The availability of resources and the costs of defence response are usually linked to aggressive and territorial behaviour (Datta & Goyal 1996; Baskaran et al. 2011) (Image 6).

Nesting

Nest characteristics: The Indian Giant Squirrel uses leaves and twigs to build large multi-layered globular shaped single chambered nests or dreys. These dreys are used for resting and sleeping, as well as nurseries. The size of the nest varies, but the largest one seen was about 75 cm x 60 cm.

The nests were typically built away from the main tree trunks, but approximately 10% of the dreys were found adjacent to the tree trunks or on thick branches. Because of the falling leaves, the nest was most easily found in march and April. During the monsoon season, nests remained mostly hidden in the canopy and were difficult to find due to the dense canopy (Image 2).

The globular dreys are usually built at the intersection of crowns of neighbouring trees. This allowed the

squirrels to easily move from the drey to other trees for foraging and other daily activities. This observation is similar to Ramachandran (1998) and Rout & Swain (1996). A few nests were also constructed on trees that had no continuity with neighbouring trees.

Dreys were constructed by gathering soft leaves from nesting trees as well as other plant species such as *Butea monosperma*, *Mangifera indica*, *Syzygium cumini*, and *Mallotus phillippensis.* These squirrels do not always use the leaves of the host plants where their dreys are located. As a result, more research is needed to understand why some trees are used for nesting but their leaves cannot be used for the nest building. The nest's consistency and rigidity were achieved through the interweaving of leaves. According to a study of old and newly constructed fallen nests, the leaves were deposited in 4 to 5 layers, with the inner layer becoming soft and mat-like (Image 3).

Within its home range, the Indian Giant Squirrel builds multiple nests (6–8), 3–4 of which are used concurrently (Borges et al. 2007). During the survey, 4,224 dreys and 223 squirrels were spotted, with 27 directly using the nests. While 196 could be seen feeding or resting on the thick branches of the trees. Some squirrels may be resting in the dreys. As a result, the number of dreys was far greater than the total number of squirrel sightings.

Nesting Trees: During this survey, 4,224 dreys were supported by a total of 4,253 nesting trees from 52 tree species (Table 3). 51.51% were new and 47.80% were old. *Mangifera indica* (Amba) and *Olea dioica* (Karap) were the most preferred nesting trees, supporting 15.57% and 14.65% dreys, respectively (Figure 2). As a result, approximately one-third of the dreys are built solely on two tree species that were not the most abundant trees on the site. It suggests that squirrels prefer specific trees to build their dreys. The reason could be the feeding habitat and the quality of the leaves used as nest construction material.

Nesting (Dreys): Indian Giant Squirrel builds new globular nests out of green leaves, twigs, and branches. The dry and moist leaves, twigs, and branches are old, and some have fallen to the ground or nest materials have become unsettled. This observation is sufficient to identify the old nest.

Number of dreys vs Number of trees

Mangifera indica, *Olea dioica*, *Mallotus phillippensis*, *Syzygium cumini*, *Terminalia chebula*, *Ficus racemosa*, and *Amerphophallus commutatus* are the most common tree species in the forest. As a result, the squirrels do not choose the tree at random for nesting. However, leaves such as *Olea dioica* and *Mallotus phillippensis* are used selectively to construct the nests (Figure 4).

Tree height and nest height

The nest was observed in trees ranging in height from 3–45 m. Trees heights less than 9 m and greater than 36.5 m are only chosen on rare occasions (Figure 5). As a result, the number of dreys on these smaller trees was noticeably lower (Table 4).

According to the observation, the most preferred tree height classes for nesting of Indian Giant Squirrels were 12–24 m, which supported 60.16% of the total observed dreys. Tree heights less than 12 m supported only 11.40% dreys, while tree heights greater than 24 m supported only 28.42% dreys. The percentage of dreys on different tree height classes thus represents the Indian Giant Squirrels nesting preference at various heights. This highlights the importance of old-growth tall trees with large interconnected canopies that provide ideal habitat for giant squirrels. The dreys were built in the middle of small branches at a mean height of about 15 m above the ground, usually in the trees sub-canopy. The average tree height minus the average nesting heights was found to be 2.3 m. Based on the data, it can be concluded that the majority of the dreys were located very close to the top canopy, which protects the squirrels and their young from large predators such as Jungle cats, civets, Leopards, snakes, and raptors.

Each giant squirrel builds several nests within its territory. Nest building is an important activity and squirrels spent nearly 3% of total hours per day (Borges 1989a). Due to population density and the fact that some adults also use other nests, nest parasitism can be seen in Indian Giant Squirrels (Borges et al. 1999). Nests are large, dome-shaped structures with lateral opening, constructed using a framework of twigs and lined by leaf sprays usually built-in tall trees. Nursery nests are large and are built either in trees densely overgrown with lianas or in those with wide-spreading branches. The nests facilitate insulated resting places throughout the territory. This avoids extremes of temperature and rain at any time (Borges 1989b). In addition, rotation of nest may also help to reduce ectoparasite load on the squirrels.

Nest construction was mostly similar in pattern. It was constructed by depositing a large no of forked twigs with leaves. The leaves were arranged in three to four layers. The nest-building process Indian giant squirrel includes a gathering of materials (cutting twigs, peeling barks), carrying materials in the mouth to the nest site, and placing materials in the nest once completed. At

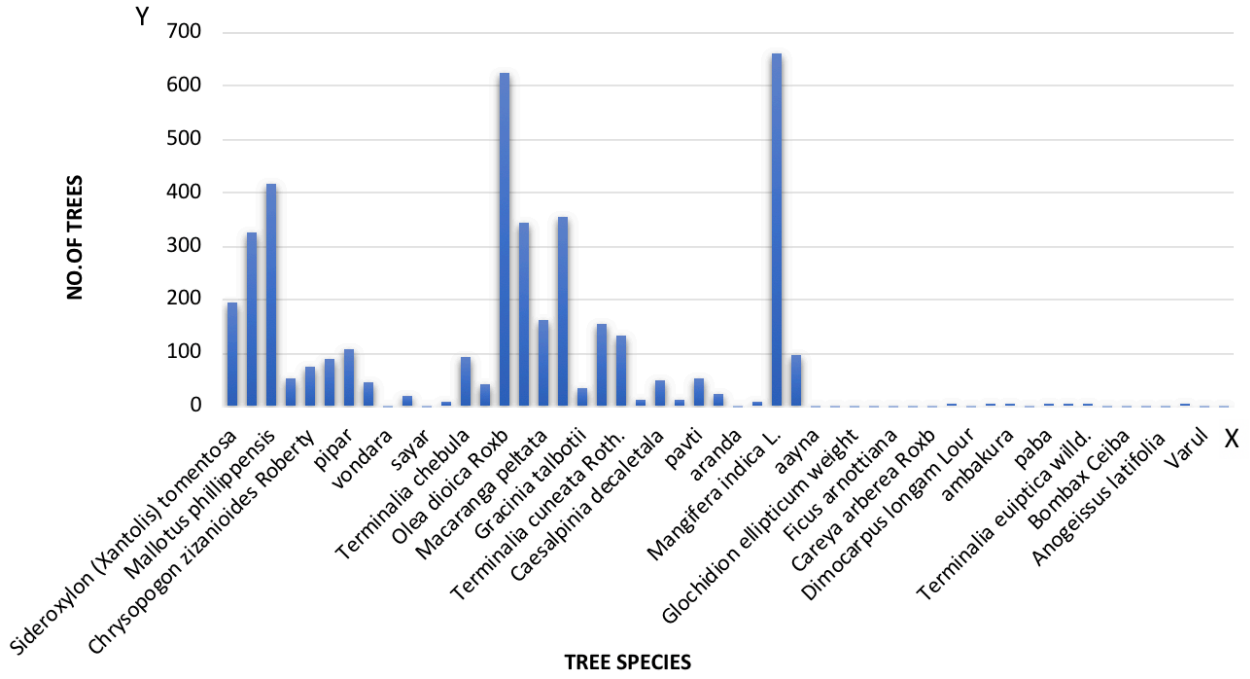

Figure 2. Nesting trees of Indian Giant Squirrel at Bhimashankar Wildlife Sanctuary.

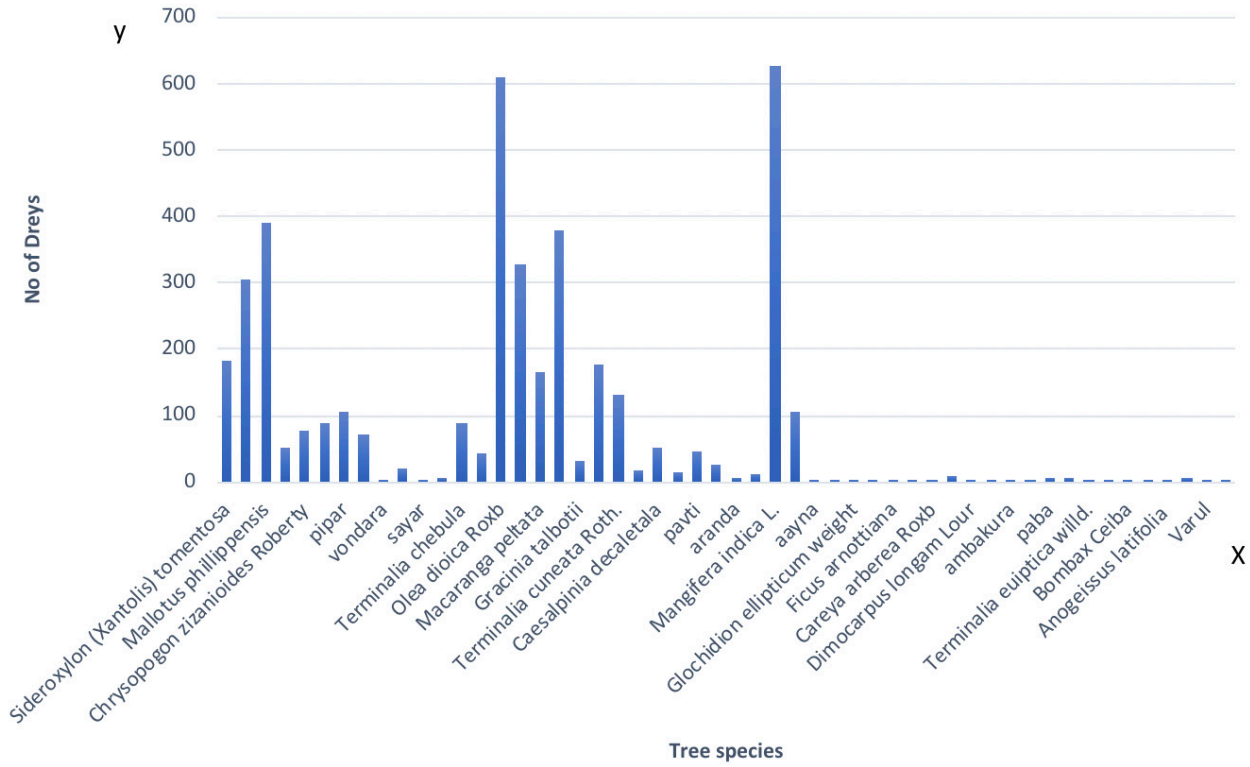

Figure 3. Dreys of Indian Giant Squirrel at Bhimashankar Wildlife Sanctuary.

Table 3. Nesting behavior and nesting characteristics of Indian Giant Squirrel at Bhimashankar Wildlife Sanctuary.

	Nesting tree species	Local name	No. of trees	Old nest	New nest	No. of dreys	% of trees	% of dreys
1	*Acalypha brachustachya*	Khokali	2	0	2	2	0.05%	0.05%
2	*Actinodaphne*	Malva	345	160	167	327	8.11%	7.74%
3	*Amerphophallus commutatus*	Loth	156	88	89	177	3.67%	4.19%
4	*Anogeissus latifolia*	Dhavda	2	0	1	1	0.05%	0.02%
5	*Atalantia*	Chingar	89	47	42	89	2.09%	2.11%
6	*Bombax Ceiba*	Savar	1	0	1	1	0.02%	0.02%
7	*Bridelia squamosa*	Ashind	8	3	8	11	0.19%	0.26%
8	*Bridellia retusa*	Asana	3	1	2	3	0.07%	0.07%
9	*Butea menosperma*	Palas	24	17	10	27	0.56%	0.64%
10	*Caesalpinia decaletala*	Chilahr	48	24	28	52	1.13%	1.23%
11	*Careya arberea*	Kumbh	1	0	1	1	0.02%	0.02%
12	*Catunaregam spinosatirumes*	Gel	11	9	5	14	0.26%	0.33%
13	*Chrysopogon zizanioides*	Yalaa	74	41	35	76	1.74%	1.80%
14	*Dimocarpus longam*	Umb	1	1	0	1	0.02%	0.02%
15	*Ficus arnottiana*	Payar	1	1	0	1	0.02%	0.02%
16	*Ficus racemosa L.*	Umber	45	36	35	71	1.06%	1.68%
17	*Glochidion ellipticum*	Bhoma	1	0	1	1	0.02%	0.02%
18	*Gracinia talbotii*	Fanasada	33	11	22	33	0.78%	0.78%
19	*Grewia serrulata*	Dhaman	20	10	10	20	0.47%	0.47%
20	*Heterophragma quadriloculare*	Varas	41	17	26	43	0.96%	1.02%
21	*Jatropa curcus*	Aranda	3	4	2	6	0.07%	0.14%
22	*Konkiri*	Konkiri	11	6	11	17	0.26%	0.40%
23	*Lepisanthes tetraphylla*	Lokhandi	7	3	4	7	0.16%	0.17%
24	*Macaranga peltata*	Chandada	163	87	79	166	3.83%	3.93%
25	*Mallotus phillippensis*	Shendri	416	179	212	391	9.78%	9.26%
26	*Mangifera indica*	Amba	662	285	343	628	15.57%	14.87%
27	*Mitragyna parvifolia*	Kalmba	4	0	2	2	0.09%	0.05%
28	*Olea dioica*	Karambu	354	187	191	378	8.32%	8.95%
29	*Olea dioica*	Karap	623	287	324	611	14.65%	14.46%
30	*Phyllanthus emblica*	Avla	1	1	0	1	0.02%	0.02%
31	*Pongamia pinnata*	Karanj	5	2	4	6	0.12%	0.14%
32	*Schleichera oleosa*	koshimba	6	5	4	9	0.14%	0.21%
33	*Sideroxylon* (*Xantolis*) *tomentosa*	Kombal	196	113	70	183	4.61%	4.33%
34	*Syzygium cumini*	Jambal	326	142	164	306	7.67%	7.24%
35	*Terminalia chebula*	Majkudhal	92	44	45	89	2.16%	2.11%
36	*Terminalia chebula*	Heerda	53	24	29	53	1.25%	1.25%
37	*Terminalia cuneata*	Sadhda	132	63	67	130	3.10%	3.08%
38	*Terminalia eliptica*	Ain	4	2	2	4	0.09%	0.09%
39	-	Pipar	106	53	53	106	2.49%	2.51%
40	-	Vondara	1	0	1	1	0.02%	0.02%
41	-	Sayar	1	0	1	1	0.02%	0.02%
42	-	Adhal	8	2	5	7	0.19%	0.17%
43	-	Pavti	53	20	26	46	1.25%	1.09%
44	-	Sandha	96	52	55	107	2.26%	2.53%

	Nesting tree species	Local name	No. of trees	Old nest	New nest	No. of dreys	% of trees	% of dreys
45	-	Aayna	3	0	1	1	0.07%	0.02%
46	-	Bhonda	1	0	1	1	0.02%	0.02%
47	-	Ambakura	7	1	2	3	0.16%	0.07%
48	-	Paba	7	3	4	7	0.16%	0.17%
49	-	Padal	1	1	0	1	0.02%	0.02%
50	-	Pareli	2	0	2	2	0.05%	0.05%
51	-	Varul	1	0	1	1	0.02%	0.02%
52	-	Sajeri	2	1	1	2	0.05%	0.05%
	Total		4253	2033	2191	4224	100.00%	100.00%

Table 4. The height class intervals with the numbers of dreys, number of trees, and number of new and old dreys.

Tree height (class interval)	Class AV. Tree height (m)	No. of trees	No. of dreys	Old nests	New nests	% Of dreys
10–19	4.5	120	118	43	75	2.793561
20–29	7.5	145	142	46	96	3.361742
30–39	10.6	220	218	95	123	5.160985
40–49	13.6	627	624	177	447	14.77273
50–59	16.6	755	753	270	483	17.8267
60–69	19.7	602	600	238	362	14.20455
70–79	22.7	575	571	282	289	13.51799
80–89	25.7	258	256	118	138	6.060606
90–99	28.8	150	149	65	84	3.527462
100–109	31.8	220	218	117	101	5.160985
110–119	34.8	170	168	72	96	3.977273
120–129	37.9	115	114	52	62	2.698864
130–139	41.0	170	169	87	82	4.000947
140–149	43.9	126	124	55	69	2.935606
Total		4253	4224	1717	2507	100%

the building site, the twigs were forced into place with a forwarding thrusting movement of the snout and alternate stamping motion of the forefeet (Kumbhar et al. 2012). The squirrel frequently builds dreys and uses more than one nest within his territory. Nonetheless, they came to the nest every morning and evening. The Indian giant squirrel did not use the nest on the first day of completion, but it was used by the individuals the following day. The total time spent on the nest building was approximately 2.5 hours. The occurrence of multiple nest might be either to escape from predators like langurs, Bonnet Monkeys, small cats or to provide protection from climatic factors like temperature, cold, and rain. Freshly constructed nests were observed from May to June. Yet the multiple nest phenomenon requires further investigation.

The nest of the Indian Giant Squirrel was distinct from a bird's nest in having leaves of nesting trees interwoven in the middle of the trees. The nest was either round or oval. The entry of the nest was placed horizontally to the ground. The entrance was around 10 cm in diameter. All nests sighted in the study area were observed to be east-facing, which might be related to morning sunlight. The depth of the nest was 48 cm and the inner diameter was 24 cm. Only a few hairs and food particles were found in the nest chamber but no faecal matter. One old nest of the Indian Giant Squirrel was located in *Ficus racemosa* where 113 twigs were used for constructing that nest. Nests were very often found at the highest point on the tree that offered maximum security and protection to the animal (Pradhan et al. 2012).

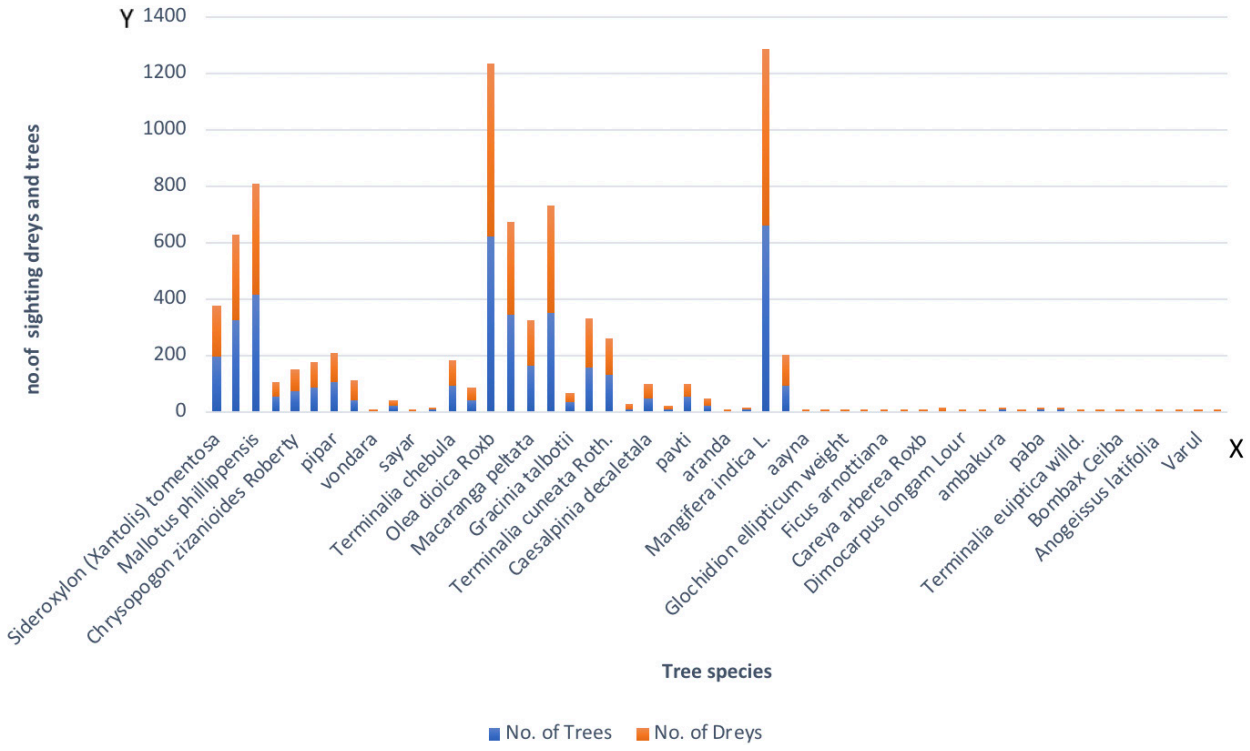

Figure 4. Nesting behaviours can show the number of trees vs number of dreys in Bhimashankar Wildlife Sanctuary.

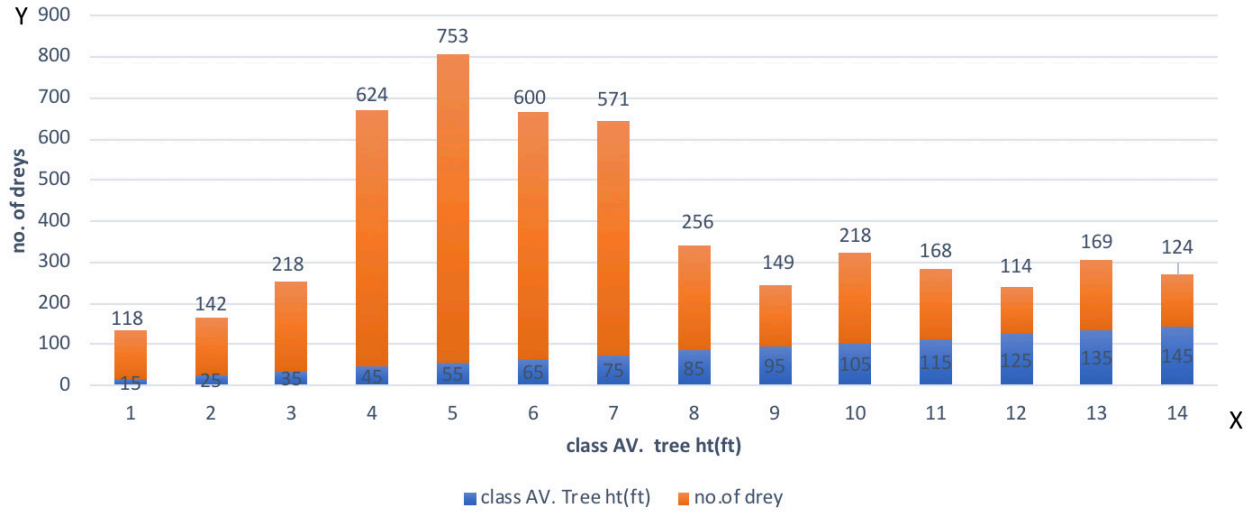

Figure 5. Tree height preference for nesting by Indian Giant Squirrel in Bhimashankar Wildlife Sanctuary.

CONCLUSION

The finding of the present study suggests the significant importance of the conservation of the Indian Giant Squirrel and its habitat. It will facilitate further research on the density and nutrient composition of forage plants of the species. The tropical forests are in danger of losing their habitats due to anthropogenic activities such as grazing and firewood collection, which indicates a decline in the population of giant squirrels in these areas. More significant conservation implementation measures, such as nature trails and roads, can be well planned. Therefore, the provision of adequate forest officers to monitor the animal and systematic scientific research focusing on an inclusive conservation strategy are a matter of urgent need.

Image 1. Old dreys of Indian Giant Squirrel.

Image 2. New nest by the Indian Giant Squirrels.

Image 3. Fallen drey of Indian Giant Squirrel.

Image 4. Indian Giant Squirrel feeding on *Mangifera indica* fruits.

Image 5. Indian Giant Squirrel feeding on *Ficus racemosa*.

It is not only restoring the habitat and control the anthropogenic pressure but also helps the long-term conservation and management of the species.

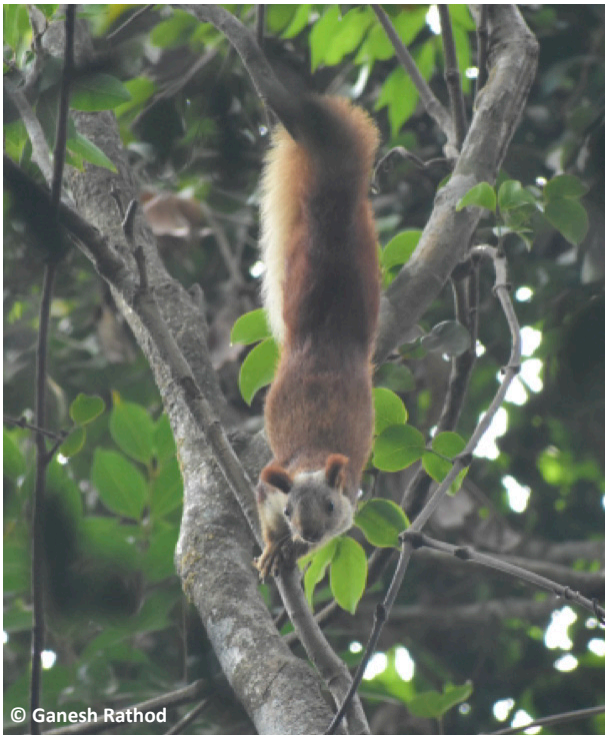

Image 6. Indian Giant Squirrel holding the branch with the feet and balancing with tail.

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Journal of Threatened Taxa is indexed/abstracted in Bibliography of Systematic Mycology, Biological Abstracts, BIOSIS Previews, CAB Abstracts, EBSCO, Google Scholar, Index Copernicus, Index Fungorum, JournalSeek, National Academy of Agricultural Sciences, NewJour, OCLC WorldCat, SCOPUS, Stanford University Libraries, Virtual Library of Biology, Zoological Records.

NAAS rating (India) 5.64

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Journal of Threatened Taxa

www.threatenedtaxa.org

ISSN 0974-7907 (Online) | ISSN 0974-7893 (Print)

September 2022 | Vol. 14 | No. 9 | Pages: 21751–21902
Date of Publication: 26 September 2022 (Online & Print)
DOI: 10.11609/jott.2022.14.9.21751-21902

Publisher & Host

WILD ZOOREACH
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